

**CLAIMS:**

1. A network node comprising:  
a transmitter;  
a receiver; and  
a controller configured to automatically and repeatedly cause the network node to cycle back and forth between transmitting information on a network with the transmitter and receiving information with the receiver from the network, wherein the lengths of at least some of the transmissions and/or receptions vary in accordance with a pre-determined pattern.
2. The network node of claim 1 further including a pseudorandom noise generator configured to generate a pseudorandom noise code and wherein the pattern is based on the pseudorandom noise code.
3. The network node of claim 2 wherein the controller is further configured to cause the transmitter to transmit an offset from the pseudorandom noise code indicative of when the network node will be receiving information.
4. The network node of claim 2 wherein the controller and receiver are further configured to cause the network node to receive an offset from the pseudorandom noise code from another network node indicative as to when the other node will be receiving information.
5. The network node of claim 4 wherein the controller is further configured to cause the transmission of the information based on the pseudorandom noise code offset received from the other node.
6. The network node of claim 1 wherein the transmitter is a wireless transmitter and the receiver is a wireless receiver.
7. The network node of claim 1 wherein the controller is configured to cause the information that is transmitted and received to be processed by spread spectrum technology.
8. The network node of claim 1 configured to function as a cell phone.

9. The network node of claim 1 wherein the controller is configured to cause the ratio of the time the network node transmits to the time the network node receives during each neighboring transmit / receive cycle to be substantially constant.

10. The network node of claim 9 wherein the controller is further configured to cause the transmitter to transmit information indicative of the ratio.

11. A process of operating a network node comprising automatically and repeatedly causing the network node to cycle back and forth between transmitting information on a network and receiving information from the network, wherein the lengths of at least some of the transmissions and/or receptions vary in accordance with a pre-determined pattern.

12. The process of claim 11 wherein the pattern is based on a pseudorandom noise code.

13. The process of claim 12 further comprising transmitting an offset from the pseudorandom noise code indicative of when the network node will be receiving information.

14. The process of claim 12 further comprising receiving an offset from the pseudorandom noise code from another node indicative as to when the other node will be receiving information.

15. The process of claim 14 further comprising transmitting the information to the other node based on the pseudorandom noise code offset received from the other node.

16. The process of claim 11 wherein the transmitting and receiving is wireless.

17. The process of claim 11 wherein the transmitting and receiving uses spread spectrum technology.

18. The process of claim 11 wherein the network node functions as a cell phone.

19. The process of claim 11 wherein the ratio of the time the network node transmits to the time the network node receives during each neighboring transmit / receive cycle is substantially constant.

20. The process of claim 19 further comprising transmitting information indicative of the ratio.

21. A network node comprising:

a transmitter;

a receiver; and

means for automatically and repeatedly causing the network node to cycle back and forth between transmitting information on a network with the transmitter and receiving information with the receiver from the network, wherein the lengths of at least some of the transmissions and/or receptions vary in accordance with a pre-determined pattern.

22. Computer readable media embodying a program of instructions executable by a computer program to perform a method of operating a network node, the method comprising:

automatically and repeatedly causing the network node to cycle back and forth between transmitting information on a network and receiving information from the network, wherein the lengths of at least some of the transmissions and/or receptions vary in accordance with a pre-determined pattern.